abcam

Product datasheet

Human Oncostatin M/OSM ELISA Kit, Fluorescent ab229401

Recombinant CatchPoint SimpleStep ELISA

7 Images

Overview

Product name Human Oncostatin M/OSM ELISA Kit, Fluorescent

Detection method Fluorescent

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	5			8%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			7%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 1.2 pg/ml

Range 2 pg/ml - 2000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	102	88% - 114%
Serum	93	86% - 97%
Hep Plasma	95	89% - 98%
EDTA Plasma	85	82% - 90%
Cit plasma	80	78% - 81%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	**Reacts with:** Human
Product overview	Oncostatin M *in vitro* CatchPoint® SimpleStep ELISA® (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Oncostatin M protein in human serum, plasma, and cell culture supernatants. This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click **here** for a list of recommended Microplate Readers. If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at **www.softmaxpro.org**. The CatchPoint® SimpleStep ELISA® employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint® HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.
Notes	Oncostatin M (OSM) is a 28-kDa pleiotropic cytokine of the IL-6 family that is a product of activated T lymphocytes, monocytes, neutrophils, and some tumor cells including breast cancer epithelial cells. Oncostatin M participates in a number of developmental, skeletal and immunological processes. Oncostatin M inhibits the proliferation of a number of tumor cell lines. It stimulates proliferation of AIDS-KS cells. Oncostatin M regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. It uses both type I OSM receptor (heterodimers composed of LIPR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST). Oncostatin M is involved in the maturation of fetal hepatocytes, thereby promoting liver development and regeneration.
Platform	Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions	Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Human Oncostatin M Capture Antibody	1 x 600µl
10X Human Oncostatin M Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

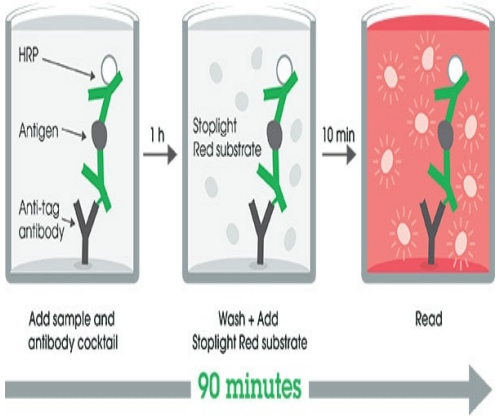
Components	1 x 96 tests
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
Antibody Diluent 5BI	1 x 6ml
Human Oncostatin M Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

Function Growth regulator. Inhibits the proliferation of a number of tumor cell lines. Stimulates proliferation of AIDS-KS cells. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. Uses both type I OSM receptor (heterodimers composed of LIPR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST).

Sequence similarities Belongs to the LIF/OSM family.

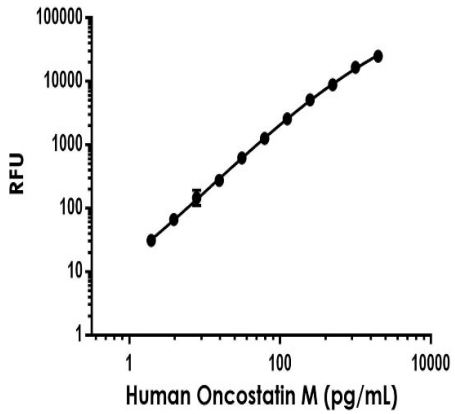
Cellular localization Secreted.

Images



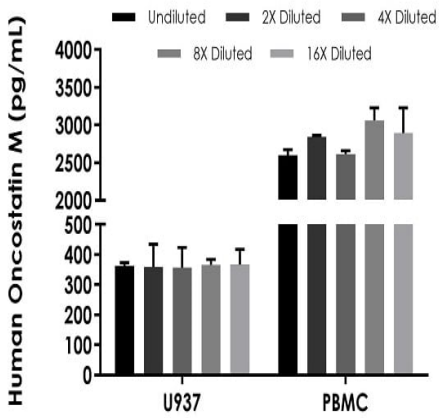
Other - Human Oncostatin M/OSM ELISA Kit, Fluorescent (ab229401)

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



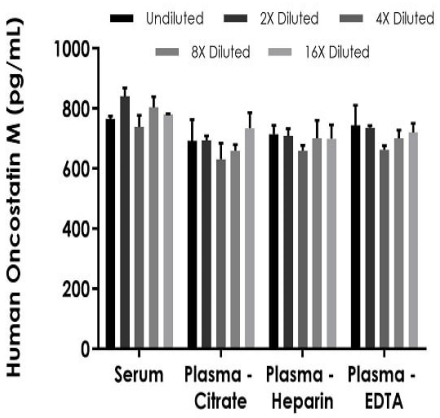
Example of human Oncostatin M standard curve in Sample Diluent NS.

The Oncostatin M standard curve was prepared as described in Section 10. Background-subtracted data values (mean +/- SD) are graphed.



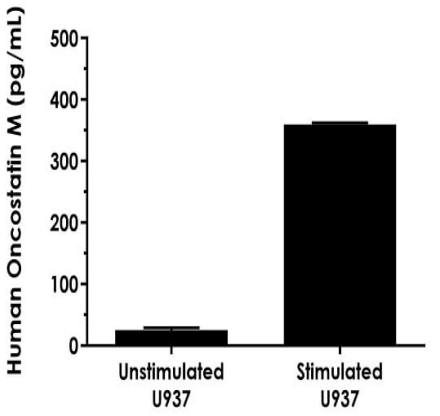
Interpolated concentrations of native Oncostatin M in human cell culture supernatant samples.

The concentrations of Oncostatin M were measured in duplicates, interpolated from the Oncostatin M standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated U937 supernatant 50% and stimulated PBMC supernatant 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean (target) concentration was determined to be 362.5 pg/mL in neat stimulated U937 supernatant and 2800 pg/mL in neat stimulated PBMC supernatant.



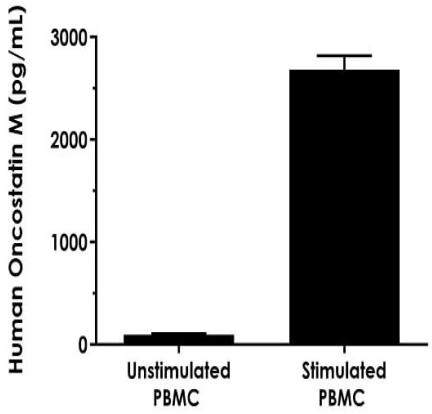
Interpolated concentrations of spike Oncostatin M in human serum and plasma samples.

The concentrations of Oncostatin M were measured in duplicates, interpolated from the Oncostatin M standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 100%, plasma (citrate) 100%, plasma (heparin) 100% and plasma (EDTA) 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



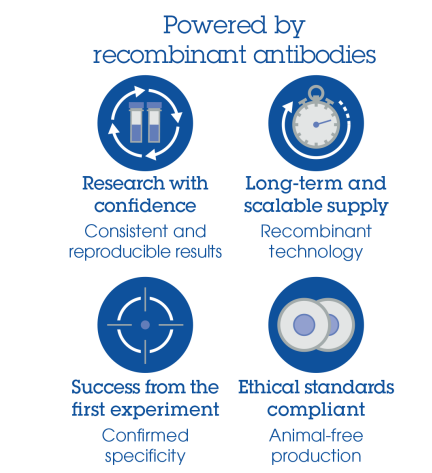
Comparison of Oncostatin M in unstimulated and TPA stimulated human U937 cell supernatants.

U937 cells were cultured in the absence or presence of 10 ng/mL TPA for 72 hours. The concentrations of Oncostatin M were measured in 50% supernatant samples in duplicates and interpolated from the IL-4 standard curve. The interpolated values are plotted (mean +/- SD, n=2). The mean Oncostatin M concentration was determined to be 363 pg/mL in neat TPA stimulated U937 cell supernatant, 24.9 pg/mL in neat unstimulated supernatants and undetectable in media (not shown).



Comparison of Oncostatin M in unstimulated and PHA-M stimulated human PBMC cell supernatants.

Human PBMC cells were cultured in the absence or presence of 1.5% PHA-M for 46 hours. The concentrations of Oncostatin M were measured in 25% supernatant samples in duplicates and interpolated from the Oncostatin M standard curve. The interpolated values are plotted (mean +/- SD, n=2). The mean Oncostatin M concentration was determined to be 2800 pg/mL in neat PHA-M stimulated PBMC cell supernatant, 96 pg/mL in neat unstimulated supernatants and undetectable in media (not shown).



Sandwich ELISA - Human Oncostatin M/OSM ELISA Kit, Fluorescent (ab229401)

To learn more about the advantages of recombinant antibodies see **here**.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors